J. biosoc. Sci. (1990) 22, 269-279

SIZE AND SOCIODEMOGRAPHIC CHARACTERISTICS OF THE AFGHAN REFUGEE POPULATION IN PAKISTAN

FARHAT YUSUF

School of Economic and Financial Studies, Macquarie University, Sydney, Australia

Summary. Some recent data are presented on the size and selected sociodemographic characteristics of the Afghan refugee population in Pakistan. Although the official figures show that there were 3·27 million registered Afghan refugees in Pakistan, it is estimated that the actual number may be as high as 3·6 million. There is an excess of females over males, mainly due to war-related activities and excessive casualties particularly among males. While infant and childhood mortality rates are declining and are lower than the levels prevalent in Pakistan, as well as in Afghanistan during the pre-war period, the fertility levels among Afghan refugees seem very high indeed.

Introduction

Relatively small movements of population, particularly of nomads, have been going on for centuries between Afghanistan and Pakistan. However, the influx of Afghan refugees since the Communist coup in December 1978 has been phenomenal, both in size and in its effects on the social and economic conditions in Pakistan. According to recent estimates, the Afghan refugees constitute the largest group of refugees in the world and the majority of them are in Pakistan.

This paper presents some recent data on the size and sociodemographic characteristics of Afghan refugees in Pakistan; most of the data were collected during a mission the author undertook in January 1989 on behalf of the United Nations Population Fund. There are two major sources of demographic data for Afghan refugees in Pakistan: the registration system introduced by the Government of Pakistan in 1979, and sample surveys conducted by various United Nations agencies and non-governmental organizations.

For purposes of comparison, it was important to obtain similar demographic data for the population of Afghanistan. No recent data were available but the author was allowed access to the report of the National Demographic and Family Guidance Survey of the Settled Population of Afghanistan which provided demographic data for 1972–73 (Hakimi & Graham, 1975).

Data on Afghan refugees

Registration data

There are two types of Afghan refugees in Pakistan: those who are registered with the Government of Pakistan and those who are not registered. While statistics are available for the former there is very little information about the number and characteristics of the latter. This is largely because most of the unregistered refugees have settled in the urban areas of Pakistan, where they seem to have integrated with the Pakistani population. According to some estimates there may be up to half a million unregistered refugees living in Pakistan (Jensen, 1989).

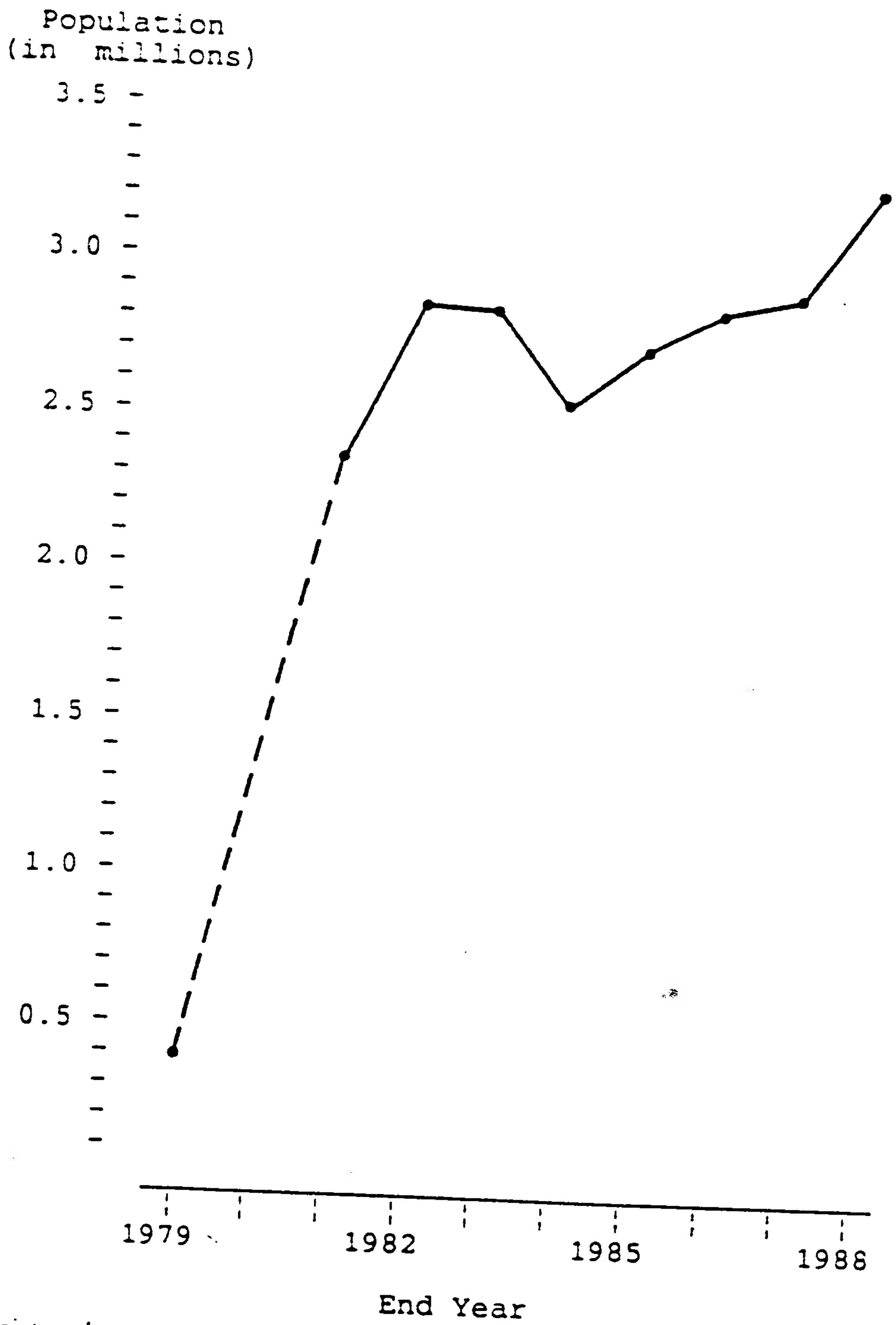


Fig. 1. Registered population of Afghan refugees in Pakistan, end of year 1979–1988.

As most of the Afghan refugees come to Pakistan in family groups, each family is issued with a registration document called the passbook. In order to obtain this, the head of the family has to produce a certificate duly signed and attested by a representative of one of the recognized political parties of Afghan refugees. This document contains the photograph and particulars of the head of the family along with the name, sex, age and the relationship to the head, of each family member. The Refugee Village Administrator keeps the original certificate provided by the family. He also records the particulars of each family on the individual reference card which he keeps. Each month he sends to the District Administrator a statement of the total number of registered families and the total registered population in his camp, together with the numbers of adult males, adult females and children. The data provided by each camp are consolidated into district, provincial and national summaries.

Figure 1 shows the registered population of Afghan refugees for the 9-year period ending 31 December, 1988. As expected, the numbers have been increasing, with the exception of 1983 and 1984. The apparent decline in those years was due to the special efforts made by the Government of Pakistan to improve the accuracy of registration data: these included the re-enumeration of Afghans living in refugee camps, and the general tightening of the registration procedures in order to ensure that only *bona fide* refugees were being registered.

Some statistics derived from the official data on registered Afghan refugees (Table 1) show first, that children constituted more than half of the population of refugee camps, and secondly that there was a surplus of adult females in the refugee population—the sex ratio was 88 adult males per 100 adult females. Given that the overall sex ratio in Afghanistan before the war was around 116 males per 100 females (Table 1) and that the sex ratio for the rural population aged 10 and over was close to 123 (Hakimi & Graham, 1975), the observed surplus of adult females among the Afghan refugees is most likely to be explained by a higher number of war-related casualties among Afghan males, or by differential emigration.

From discussions with the officials from the United Nations High Commissioner for Refugees, the World Food Programme and other agencies it seems that there are inaccuracies in the official registration data. The causes include: some families hold multiple passbooks; some absent family members are registered as present; 'ghost families', i.e. families who had left camps without having their passbooks cancelled; babies born to Afghan refugees in Pakistan are not being registered; the imposition of a maximum limit of seven members per family who could be registered, irrespective of the actual size of the refugee family. It is obvious that the first three of these problems would have an inflationary effect on the estimated population of registered Afghan refugees in Pakistan, while the last two would have the opposite effect. The effect of the last two may be assessed as follows.

If one assumes that the registered population of Afghan refugees at the end of 1981 was 2 million instead of the reported 2·375 million, and that the crude birth rate was around 50 births per 1000 population per annum, then over the past 7 years at least 700,000 births must have occurred in the refugee camps. The assumed crude birth rate is based on the fact that in Afghanistan in 1972–73 it was 43 births per 1000 population per annum (Appendix Table A). Moreover, there is some evidence that the fertility of Afghan women in refugee camps is quite high; for example, Krijgh (1987)

Table 1. Statistics on Afghan refugees registered in Pakistan, 31 December 1988

Area	Camps		Population					Average size	
			Total		Adults %		Children %		
	N	%	*N* (000s)	%	M	F		Camp§	Family
Pakistan	345	100	3,271	100·0	23	26	51	9,000	6·20
NWFP	251	73	2,237	68·4	23	26	51	9,000	6·22
Settled Districts	155	45	1,366	41·8	22	26	52	9,000	5·87
Abbotabad	18	5	143	4·4	15	23	62	8,000	6·02
Bannu	7	2	74	2·3	21	27	53	11,000	6·89
Chitral	3	*	38	1·2	23	31	46	13,000	5·81
Dir	10	3	90	2·7	19	28	53	9,000	5·70
D. I. Khan	11	3	88	2·7	21	28	52	8,000	6·77
Kohat	18	5	230	7·0	25	28	46	13,000	7·15
Mansehra	9	3	72	2·2	13	20	68	8,000	7·06
Mardan	17	5	107	3·3	21	27	52	6,000	5·92
Peshawar-I	31	9	283	8·7	23	26	50	9,000	4·88
Peshawar-II	29	8	226	6·9	25	24	51	8,000	5·41
Swat	2	*	14	0·4	18	29	53	7,000	5·55
Tribal Agencies	96	28	870	26·6	25	27	48	9,000	6·85
Bajaur	25	7	198	6·1	24	29	47	8,000	6·95
Kurram	34	10	348	10·6	29	28	43	10,000	6·85
Malakand	3	*	55	1·7	14	26	60	18,000	6·95
Mohmand	2	*	16	0·5	29	32	40	8,000	6·00
N. Waziristan	24	7	184	5·6	25	23	51	8,000	7·03
Orakzai	2	*	13	0·4	20	37	43	7,000	6·77
S. Waziristan	6	2	57	1·7	21	24	55	9,000	6·17
Baluchistan	77	22	836	25·5	23	27	50	11,000	6·27
Chagai	21	6	172	5·3	23	27	50	8,000	6·02
Gulistan	12	3	172	5·2	23	27	50	14,000	6·48
Loralai	10	3	105	3·2	23	27	50	11,000	6·20
Pishin	19	6	169	5·2	23	27	50	9,000	6·59
Quetta	5	1	121	3·7	23	27	50	24,000	5·93
Zhob	5	1	55	1·7	23	27	50	11,000	6·06
Chaman	5	1	42	1·3	23	27	50	8,000	6·86
Punjab†	16	5	180	5·5	16	23	61	11,000	5·67
Sind‡	1	*	19	0·6	24	28	48	19,000	6·23

* Less than 1%.
† Kot Chandna, District Mianwali.
‡ Karachi.
§ To nearest thousand.

reported a total marital fertility rate of 13·8 from her survey of women living in refugee camps in Kohat district in North West Frontier Province (NWFP). Even allowing for infant and childhood mortality, it is likely that at least 550–600,000 of these Pakistan-born Afghan children must be alive and should have been included in the registered population of Afghan refugees.

The restriction placed on the number of family members not to exceed seven has resulted in an average family size for registered Afghans of 6·2 persons. A study by the United Nations Research Institute for Social Development (UNRISD) in 1986 showed that the average size of a household was 8·5 (Christensen & Scott, 1988). Although the definition of the household in that study may be different from that of the family as given in the official statistics, it is unlikely that these were very different. The UNRISD study did not distinguish between the registered and unregistered people living in the camps, and from its findings, it appears that the average size of a family calculated from the official registration statistics was underestimated by 2·3 members per family. Although the reported number of refugee families living in camps was 527,923 at the end of 1988, even allowing for the 'ghost families' by say 20% and for differences in the definitions of households and families, the true number of families living in refugee camps at that date must be around 422,000. If the UNRISD estimate of average size of 8·5 is correct, there must have been about 3·6 million Afghan refugees living in camps at the end of 1988.

Information on age of the family members was recorded at the time of registration, but was not compiled. During his visits to the refugee camps the author noted that the information on age, although suffering from the usual problems of misreporting and digital preference, was easily accessible from the registration documents. It is unfortunate that this information was not deemed important enough by the Government of Pakistan or the UN agencies to be compiled for planning purposes. This is perhaps one of the biggest gaps in the official registration statistics. On the other hand, information on refugees' places of origin in Afghanistan and tribes to which they belonged, is being compiled and will certainly be useful in planning for the repatriation of Afghan refugees from Pakistan.

Survey data on Afghan refugees

Seven sample surveys have been conducted on various aspects of the population of Afghan refugees in Pakistan. The first three, dealing with infant mortality and childhood nutritional status were carried out by the Centres for Disease Control (CDC) of the US Public Health Service in 1984, 1985 and 1986. Two similar, but somewhat localized, surveys on the health status of Afghan women and children were conducted by the International Rescue Committee (IRC) in 1986 and 1987. A survey on social and economic conditions of Afghan refugees was completed in 1986 by the UNRISD, and finally, a survey concerned with the estimation of war related casualties among Afghan refugees was conducted by Gallup Pakistan in 1987. The CDC and UNRISD surveys were sponsored by the United Nations High Commission for Refugees, while the remainder were funded by various non-governmental organizations.

The CDC surveys. These surveys aimed to assess the current infant and neonatal mortality and childhood under-nutrition among Afghan refugees. Samples of

children, 0–4 years of age, were drawn for the 1984, 1985 and 1986 surveys numbering respectively 2136, 2425 and 2439 children. A two-stage, random start, cluster sampling method was used in all three surveys. The first stage identified the specific refugee camps where sample clusters were located, while in the second stage the particular households within the sampled clusters were identified. The sampling frame was intended to include all Afghan refugees living in camps in Pakistan. Interviewing of respondents, who were all females, was done by three teams of three–four lady health visitors during the months of April and May.

Comparison of the three CDC surveys (Table 2) shows a substantial decrease in neonatal and infant mortality and improvement in nutritional status of the Afghan refugee children over the 3-year period. Moreover, the proportion of children suffering from diarrhoea, during the week prior to the interview, had declined, while the proportion of children who had had BCG vaccination had increased. The 95% confidence intervals for the annual estimates of infant mortality rates overlap and therefore it is difficult to say conclusively that the observed decline was statistically significant. The report simply claims that the observed changes are real.

Substantial differences were observed between refugee camps in NWFP/Punjab and Baluchistan. The 1986 survey, in which over-sampling was done in Baluchistan so as to obtain more robust estimates for that province, confirmed the earlier findings that the infant mortality rate in Baluchistan was up to 70% higher than the levels prevalent in refugee camps elsewhere in Pakistan. Although no differences in levels of neonatal mortality were observed, diarrhoea prior to death was experienced by 57% of the post-neonatal infant deaths among refugees in Baluchistan, and under-nutrition among refugee children in Baluchistan was more prevalent than in NWFP/Punjab.

If the CDC trend is real then the infant mortality rate among Afghan refugees in Pakistan in 1986 was 28% lower than that in Pakistan as a whole: 112 infant deaths per 1000 live births during 1984–86 (Rukanuudin & Farooqui, 1988). From

Table 2. Results from the CDC surveys among Afghan refugees, 1984–86

Parameter	1984	1985	1986
Total children < 5 years old	2136	2425	2439
Live births in past 12 months	595	632	627
Infant deaths in past 12 months	92	75	51
Infant mortality rate (per 1000)	156	119	81
Neonatal mortality rate (per 1000)	61	46	40
% of children dying before 5th birthday	23	19	12
% of children with diarrhoea in past 7 days	38	35	28
% of children with BCG scar	*	41	55
% of children weighed			
≥ median wt	26	35	42
< 80% of median wt	4	2	2

Source: Boss & Lewis (undated).

discussions with various persons associated with the provision of health services for Afghan refugees the author was unable to find reasons for this difference in infant mortality levels.

The IRC surveys. The two IRC surveys had objectives very similar to those of the CDC surveys, except that in the 1987 survey information on pregnancy and childbirth, including some questions on child spacing, were also asked. These surveys were conducted in Afghan refugee camps in Kohat district, NWFP, where IRC operates. The method of the IRC surveys was similar to the CDC, except that the questionnaire used in the former was much more detailed.

In the IRC surveys, while neonatal mortality remained more or less constant (Table 3), infant mortality substantially declined, though again the 95% confidence intervals for the 1986 and 1987 infant mortality rates overlapped. Overall the findings of these surveys were similar to those of the CDC surveys.

Perhaps one of the most important contributions of the IRC surveys was the estimation of fertility of Afghan refugee women and the information on family planning. The estimated total marital fertility rate was nearly 14 (Table 3), and the general fertility rate was about 400 per 1000 women. These very high levels of fertility are at least partially corroborated by population pyramids (Fig. 2).

Some of the other important findings are: nearly 24% of all women were pregnant at the time of interview, and an additional 6% thought they were in the first months of pregnancy; about one in four women had experienced one or more miscarriages or stillbirths; 43% of all women wanted trained assistance available during their deliveries (actually 75% were assisted by their mothers or close female relatives); thirteen out of every 1000 women reported a maternal death among their relatives; 44% of respondents favoured the idea of child spacing but described their reasons for

Table 3. Results from the IRC surveys among Afghan refugees in Kohat District

Parameter	1986	1987
Total children <5 years old	888	997
Live births in past 12 months	246	270
Infant deaths in past 12 months	27	19
Infant mortality rate (per 1000)	87	52
Neonatal mortality rate (per 1000)	21	22
% of children dying before 5th birthday	12	10
% of children with diarrhoea	40	28
% of children with BCG scar	69	79
Total number of women	588	674
General fertility rate (per 1000)	*418	400
Total marital fertility rate	*	13·6
Compounds using improved water supply	32	65
Compounds with kitchen gardens	35	36
Compounds with poultry livestock	52	100
Compounds with ventilated improved pit latrines	43	46

Source: Krijgh (1987).

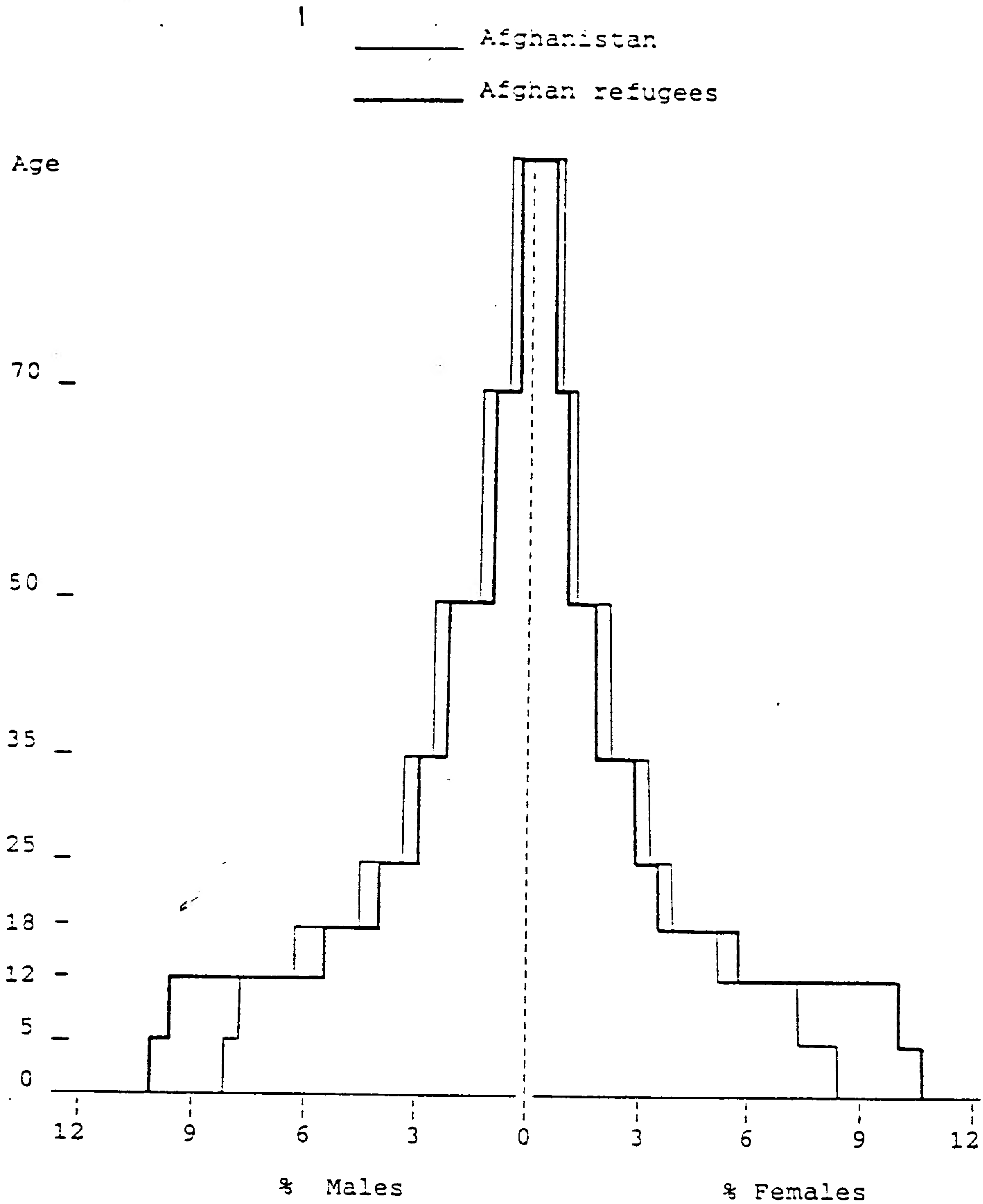


Fig. 2. Population pyramids for Afghanistan (1972–73) and for Afghan refugees in Pakistan (1986).

not using contraception. Some reasons were: 13% had only 'few' children; 16% were not permitted by the husband or mother or mother-in-law; 4% had no need as the husband was away; 3% were too young. Fifteen per cent of respondents like the idea of birth spacing and 3% had used or were currently using a method of contraception. Thirty-three per cent of respondents were against contraception and wanted more children.

It is not possible to comment on the accuracy or otherwise of these findings, particularly regarding family planning attitudes and practices. However, discussions with many doctors and the health visitors, active in the provision of health services among Afghan refugees, elicited the fact that the topic of birth spacing is sometimes discussed (usually at the request of the patient) but in a very discreet manner and mainly in the context of a woman's health.

The UNRISD survey. The main objective of this survey of Afghan refugees was to obtain information on economic characteristics, such as pre-migration occupational skills and training, current and potential earnings, and willingness to learn new skills. A stratified two-stage random sampling procedure was used to obtain a sample of 2298 households. A male and a female respondent from each were interviewed by an interviewer of the same sex (Christensen & Scott, 1988). Some of the important findings of this survey are: 70% of the respondents were farmers; 40% of male and 3% of female respondents were literate; two-thirds of males and one in nine females (aged 18–49) were gainfully employed; most women were self employed at home in embroidery, sewing, etc.; median and mean household incomes were Rs 360 and Rs 570 per month respectively; 75% of household income (not counting aid) was from employment, 15% from livestock and poultry, and 5% from vegetables; about 70% of the households had insufficient income to cover minimal needs; two earners per household are required to cover minimal needs; it takes 2 years for a refugee household to settle down to the new employment and income; 20% of households were unregistered. Of the remainder: 30% had all members registered; 50% had one or more members unregistered; 6% had more registered persons than the actual number of household members. Average household size was 8·5 persons, including both the registered and other members.

In the UNRISD survey information on age, sex and other characteristics of all household members was obtained irrespective of their registration status. The population pyramid for Afghan refugees, based on the UNRISD data, is compared (Fig. 2) with a pyramid based on the 1972–73 demographic survey conducted in Afghanistan. The overall sex ratio among Afghan refugees was 95 males per 100 females, compared to 116 males per 100 females in Afghanistan before the war. There are considerably higher fertility levels among Afghan refugees. Given that the crude birth rate in Afghanistan for 1972–73 was 43 per 1000, the UNRISD data (Fig. 2) corroborate the author's assumption that the birth rate among the refugees would be no less than 50 per 1000. Moreover, the lower proportion of adult Afghan refugees compared to the pre-war population in Afghanistan is comparable with the effect of war casualties.

Gallup Pakistan's survey. The main objective of this survey was to estimate the demographic effect of the Afghan war. It covered a sample of 1963 nuclear families in Afghan refugee camps in Pakistan. Information was collected on all family members living in April 1978 when the Communist *coup* took place in Afghanistan. The respondents were then asked to add to this information all births and deaths, together with precise causes and circumstances of death. Other data collected included migration routes to Pakistan, socioeconomic characteristics and ethnic background of the sampled families.

Among the most significant findings of this survey was the extent to which war

casualties affected the demography of Afghanistan. It is estimated that the war accounted for deaths of about 9% of the population. From this figure, the number of Afghans killed is estimated to lie between one and one and a half million people, depending upon the size taken for the pre-war population which was between 12 and 15·5 million (Sliwinski, 1988).

Other statistics

Other statistics available include those on maternal and child health and routine data on attendance at the basic health units, classified according to broad diagnostic categories. Although these data are in various stages of completeness and are not yet available in a format amenable to detailed statistical and demographic analysis, they give some indication of problems likely to need intervention.

Conclusion

The data presented in this paper were collected under unusual circumstances and were subject to varying degrees of error. For example, the information on the size of the refugee population was not collected as part of a statistical exercise, but was a by-product of the administration of the refugee camps and hence had inherent problems, as described. Information on the sociodemographic characteristics came mainly from sample surveys which were subject to both sampling and non-sampling errors. Overall, the quality of the sample survey data seemed reasonable; however, some of the findings, for example, the substantial drop in infant and childhood mortality rates in Afghan refugee camps over a period of 3 years seem doubtful.

Pakistan and, to a lesser extent Iran, have been the two most popular destinations for Afghan refugees. Very little is known about the size of the Afghan refugee population in Iran but figures as high as two million have been quoted. The presence of a large foreign-born population has significant social, economic and political implications for the recipient countries. This is certainly the case in Pakistan.

Acknowledgments

The author acknowledges the assistance provided by officials of the Government of Pakistan, the United Nations and its specialized agencies, and non-governmental organizations engaged in providing help to Afghan refugees in Pakistan. The author is particularly grateful to the United Nations Population Fund (UNFPA) for allowing him to use material collected during a mission undertaken on their behalf in early 1989. Views expressed are the author's own and not necessarily those of the UNFPA.

References

Boss, L. P. & Lewis, J. (undated) *Evaluation of Infant Mortality and Childhood Nutritional Status among Afghan Refugees in Pakistan, 1986*. Centers for Disease Control, US Public Health Service, Atlanta, Georgia.

CHRISTENSEN, H. & SCOTT, W. (1988) *Survey of the Social and Economic Conditions of Afghan Refugees in Pakistan*. United Nations Research Institute for Social Development, Geneva, Switzerland.

HAKIMI, A. K. & GRAHAM, S. (1975) *National Demographic and Family Guidance Survey of the Settled Population of Afghanistan*. Central Statistics Office, Prime Ministry, Government of Afghanistan and the US Agency for International Development.

JENSEN, L. (1989) Peshawar bursting with people and energy. *Pakistan Times*, 7 February.

KRIJGH, E. (1987) *Health Status of Afghan Women and Children: An Assessment of Trends in 10 Refugee Camps Between Hangu and Thal, NWFP, Pakistan*. International Rescue Committee, Peshawar, Pakistan.

RUKANUDDIN, A. R. & FAROOQUI, M. N. I. (1988) *The State of Population in Pakistan*. National Institute of Population Studies, Islamabad, Pakistan.

SLIWINSKI, M. (1988) Afghanistan: the decimation of a people. *Orbis*, 33, 39.

Received 2nd November 1989

Appendix

Table A. Some demographic parameters for Afghanistan, 1972–73

Parameter	Total	Urban	Rural
Average household size	6·23	6·60	6·17
Overall sex ratio	115·6	114·9	115·9
Crude birth rate (per 1000)	43	38	44
Total fertility rate (per woman)	6·9	5·9	7·1
Crude death rate (per 1000)			
Both sexes	21·0	13·0	22·4
Males	20·4	12·9	21·8
Females	21·6	13·2	23·1
Infant mortality rate (per 1000)			
Both sexes	184·9	130·7	193·2
Males	208·2	154·4	216·4
Females	160·8	106·8	169·2

Source: Hakimi & Graham (1975).